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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/393,527	09/10/1999	BRUCE HA	79927RLO	2847

1333 7590 01/17/2002

PATENT LEGAL STAFF  
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ROCHESTER, NY 14650-2201

EXAMINER
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EATON, KIMBERLY B

ART UNIT	PAPER NUMBER
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2161

DATE MAILED: 01/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/393,527

Applicant(s)

HA ET AL.

Examiner

Kimberly B Eaton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 September 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 7 and 8 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

3. Claim 7 states "the hybrid optical recording disc of claim 3 wherein the disc identifier data are embedded in a disc identifier sub-code track within a power calibration area (PCA)." Claim 3 states, "the lead-in area of the ROM area includes addressing tracks...at least one of the addressing tracks being a disc identifier sub-code track containing disc identifier data embedded therein...". Claim 7 in view of claim 3 is taken to mean the disc identifier data is embedded in a disc identifier sub-code track within a power calibration area and the disc identifier sub-code track is also within the lead-in area of the ROM area. This leads one of ordinary skill in the art to believe the power calibration area containing the disc identifier sub-code track must be within the lead-in area of the ROM area. However, referring to page 6, line 28 of the specification of the instant application the applicant claims, "the disc sub-code can be embedded, alternatively, in a portion of a wobble track associated with a power calibration area (PCA)..., such tracks preceding the lead-in area". The specification clearly states that

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the PCA and lead-in area are separate areas of the disc, with one area preceding the other area. Accordingly, appropriate correction is required.

4. Claim 8 states "the hybrid optical recording disc of claim 3 wherein the disc identifier data are embedded in a disc identifier sub-code track within a program memory area (PMA)." Claim 3 states, "the lead-in area of the ROM area includes addressing tracks...at least one of the addressing tracks being a disc identifier sub-code track containing disc identifier data embedded therein...". Claim 8 in view of claim 3 is taken to mean the disc identifier data is embedded in a disc identifier sub-code track within a program memory area and the disc identifier sub-code track is also within the lead-in area of the ROM area. This leads one of ordinary skill in the art to believe the program memory area containing the disc identifier sub-code track must be within the lead-in area of the ROM area. However, referring to page 6, line 28 of the specification of the instant application the applicant claims, "the disc sub-code can be embedded, alternatively, in a portion of a wobble track associated with ... a program memory area (PMA), such tracks preceding the lead-in area". The specification clearly states that the PMA and lead-in area are separate areas of the disc, with one area preceding the other area. Accordingly, appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Yamagishi (US Patent No. 5,379,433).

7. In re claim 1 Yamagishi shows in figures 1-4 and related text a hybrid optical recording disc having copy protection for use in a computer (column 2, line 1 – column 2, line 22; figure 2) comprising: a read-only area having preformed information including at least one program and disc identifier data (column 1, line 13 – column 1, line 15; column 2, line 12 – column 2, line 20); a recordable area (column 2, line 15 – column 1, line 16; column 2, line 20 – column 2, line 22); the disc identifier data being adapted to authenticate a transferred program in the computer to permit the program to be operated on the computer (column 2, line 49 – column 2, line 63).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamagishi and further in view of Spitzenberger et al. (US Patent No. 5,930,209).

10. In re claim 2 Yamagishi shows a hybrid optical recording disc with copy protection for use in a computer (column 2, line 1 – column 2, line 22; figure 2), the disc having a recording layer (column 1, line 13 – column 1, line 16; column 2, line 16 –

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column 2, line 22), a mastered read-only memory (ROM) area (column 1, line 13 – column 1, line 15), program tracks dedicated to contain computer software programs (column 2, line 16 – column 2, line 20), a recordable area for recording therein data generated by a computer user and for reading such recorded data from the recordable area to a computer (column 1, line 115 – column 1, line 16; column 2, line 20 – column 2, line 22); tracks of the ROM area includes at least one disc identifier containing disc identifier data embedded therein (column 2, line 12 – column 2, line 16) such that the disc identifier data will authenticate the installed disc addressing data and computer software programs for operation in the computer from the hybrid optical recording disc (column 2, line 36 – column 2, line 56) but will not be transferred, thereby providing protection against copying the disc (column 2, line 23 – column 2, line 35); the program tracks of the ROM area include at least one program identifier track containing program identifier data embedded therein which identify the computer software programs (column 2, line 49 – column 2, line 63); the recordable area includes at least one software identifier track containing software identifier data recorded therein of the computer software programs which are included in the program tracks of the ROM area of the hybrid optical recording disc (column 2, line 49 – column 2, line 63).

11. Yamagishi does not explicitly show the disc has a substrate and the recording layer is disposed over the substrate, the substrate having the mastered read-only memory (ROM) area and the program tracks dedicated to contain computer software programs, and the substrate having the recordable area.

12. However, as will be appreciated by one of ordinary skill in the art, an optical recording disc is well known in the art to be a disc composed of a substrate and a recording layer disposed over the substrate, the substrate having a mastered read-only memory (ROM) and program tracks dedicated to contain computer software programs, and the substrate having a recordable area.

13. Yamagishi still does not show the mastered read-only memory (ROM) area includes addressing tracks dedicated to contain disc addressing data which govern read and record processes to and from the computer; the addressing tracks of the ROM area include the at least one disc identifier as a sub-code track.

14. Spitzenberger et al. shows, in an analogous art related to software copy protection and optically readable discs on which digital data has been recorded, the mastered read-only memory (ROM) area includes addressing tracks dedicated to contain disc addressing data which govern read and record processes to and from the computer (column 2, line 10 – column 2, line 20); the addressing tracks of the ROM area include the at least one disc identifier as a sub-code track (column 2, line 20 – column 2, line 27). The addressing tracks of Spitzenberger et al. function in aiding software copy protection because the address values cannot be created using a standard optical recording apparatus (see Spitzenberger et al., column 2, line 18 – column 2, line 20) and thus cannot be recreated on an unauthorized copied disc. Additionally, by including the at least one disc identifier within the addressing tracks of Spitzenberger as a sub-code track the software copy protection system is further enhanced because the sub-code data cannot be controlled directly by a standard

recording device (see Spitzenberger et al., column 2, line 25 – column 2, line 27) and thus cannot be manipulated or changed by the user.

15. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the at least one disc identifier within the addressing tracks of Spitzenberger et al. as a sub-code track in Yamagishi for the explicit reasons discussed herein above.

16. In re claim 3 Yamagishi shows in figures 1-4 and related text a hybrid optical recording disc with copy protection for use in a computer (column 2, line 1 – column 2, line 22; figure 2); the disc having a recording layer (column 1, line 13 – column 1, line 16; column 2, line 16 – column 2, line 22), a mastered read-only memory (ROM) area (column 1, line 13 – column 1, line 15) and a recordable area for recording data generated by a computer user and for reading such recorded data from the disc to a computer (column 1, line 15 – column 1, line 16; column 2, line 20 – column 2, line 22); the ROM area includes disc identifier data embedded therein (column 2, line 12 – column 2, line 16), such disc identifier data authentication for computer operation (column 2, line 36 – column 2, line 63) but will not be transferred from the computer to thereby provide protection against copying the disc (column 2, line 23 – column 2, line 35); the program area of the ROM area contains program tracks dedicated to program data corresponding to computer software programs and such program data will be transferred to a memory device of a computer when installing the hybrid optical recording disc on the computer (column 1, line 16 – column 1, line 20); the program area of the ROM area includes at least one program identifier track containing program



identifier data embedded therein which identify the computer software programs (column 2, line 49 – column 2, line 56); the recordable area of the disc includes at least one software identifier track in the recordable area, the software identifier track containing software identifier data recorded therein of the computer software programs which are included in the program tracks of the ROM area of the disc, such software identifier data being provided to a computer user, thereby enabling installation of the disc's software program data on a computer (column 2, line 49 – column 2, line 56).

17. Yamagishi fails to explicitly show the hybrid optical disc is a disc having a substrate and the recording layer is disposed over the substrate, the substrate having the mastered read-only memory (ROM) area and which is comprised of a lead-in area, a program area, and a lead-out area, and the substrate having the recordable area.

18. However, as will be appreciated by one of ordinary skill in the art, an optical recording disc is well known in the art to be a disc having a substrate and a recording layer disposed over the substrate having a mastered read-only memory (ROM) area and the substrate having the recordable area.

19. Yamagishi still fails to show the mastered read-only memory (ROM) is comprised of a lead-in area, a program area, and a lead-out area; the lead-in area of the ROM area includes addressing tracks dedicated to disc addressing data which govern read and record processes to and from a computer, at least one of the addressing tracks being a disc identifier sub-code track containing the disc identifier data embedded therein; the lead-out area of the ROM area contains data instructing a computer of a

termination of the ROM program area and data indicating a start of a new lead-in area associated with a recordable area of the hybrid optical recording disc.

20. Spitzenberger et al. shows, in an analogous art related to software copy protection and optically readable discs on which digital data has been recorded, in figures 1-9 and related text, the read-only memory (ROM) area is comprised of a lead-in area, a program area, and a lead-out area (column 2, line 45 – column 2, line 51); the lead-in area of the ROM area includes addressing tracks (column 2, line 46 – column 2, line 51) dedicated to disc addressing data which govern read and record processes to and from a computer (column 2, line 11 – column 2, line 20), at least one of the addressing tracks being a disc identifier sub-code track containing the disc identifier data embedded therein (column 2, line 21 – column 2, line 27); the lead-out area of the ROM area contains data instructing a computer of a termination of the ROM program area and data indicating a start of a new lead-in area associated with a recordable area of the hybrid optical recording disc (column 2, line 45 – column 2, line 51). The lead-in area, program area and lead-out area in conjunction with the addressing tracks of Spitzenberger et al. function in aiding software copy protection because the address values cannot be created using a standard optical recording apparatus (see Spitzenberger et al., column 2, line 18 – column 2, line 20) and thus cannot be recreated on an unauthorized copied disc. Additionally, by including the at least one disc identifier within the addressing tracks of Spitzenberger as a sub-code track the software copy protection system is further enhanced because the sub-code data cannot

be controlled directly by a standard recording device (see Spitzenberger at al., column 2, line 25 – column 2, line 27) and thus cannot be manipulated or changed by the user.

21. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the lead-in area, program area and lead out area of Spitzenberger and the at least one disc identifier within the addressing tracks of Spitzenberger et al. as a sub-code track in Yamagishi for the explicit reasons discussed herein above.

22. In re claim 4, Yamagishi shows in figures 1-4 and related text the recordable area of the hybrid optical recording disc includes a recordable program area for recording therein data generated by a computer user and for reading such recorded data from the recordable program area to the computer (column 2, line 16 – column 2, line 22).

23. In re claim 5, Yamagishi shows in figures 1-4 and related text a method of providing a hybrid optical recording disc with copy protection for use in a computer, comprising the steps of: mastering a read-only memory (ROM) area and a recordable area on a disc so that the ROM area includes program tracks (column 1, line 13 – column 1, line 18; column 2, line 16 – column 2, line 20), the program tracks of the ROM area including at least one program identifier track containing program identifier data embedded therein which identify computer software programs contained in the ROM program tracks (column 2, line 12 – column 2, line 20; column 2, line 36 – column 2, line 63); an optical recording layer (column 1, line 13 – column 1, line 18); recording in a designated software identifier track of the recordable area a software identifier (column 2, line 12 – column 2, line 16), the software identifier recording step being implemented

in correspondence with the software programs included in the program tracks of the disc's ROM area (column 2, line 49 – column 2, line 56), the software identifier also being provided to a computer user and corresponding to a hybrid optical recording disc having selected software program titles contained in the program tracks of the ROM area (column 2, line 49 – column 2, line 56).

24. Yamagishi fails to show the ROM area and recordable area are on a disc substrate; the ROM area includes addressing tracks, the addressing tracks including at least on disc identifier sub-code track for embedding therein authenticating disc identifier data which will not be transferred from the computer when installing the disc in the computer, thereby providing protection against copying the disc; coating the optical recording layer over the mastered disk substrate.

25. Spitzenberger et al. shows in an analogous art related to software copy protection and optically readable discs on which digital data has been recorded, in figures 1-9 and related text, the addressing tracks including at least one disc identifier sub-code track for embedding therein authenticating disc identifier data which will not be transferred from the computer when installing the disc in the computer, thereby providing protection against copying the disc (column 2, line 10 – column 2, line 26). The addressing tracks of Spitzenberger cannot be created using a standard optical recording apparatus (see Spitzenberger et al., column 2, line 18 – column 2, line 20) and thus cannot be recreated on an unauthorized copied disc. Additionally, by embedding the at least one disc identifier within the addressing tracks of Spitzenberger as a sub-code track the software copy protection system is further enhanced because

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the sub-code data cannot be controlled directly by a standard recording device (see Spitzenberger et al., column 2, line 25 – column 2, line 27) and thus cannot be manipulated or changed by the user.

26. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the at least one disc identifier within the addressing tracks of Spitzenberger et al. as a sub-code track in Yamagishi for the explicit reasons discussed herein above.

27. Yamagishi in view of Spitzenberger still fails to explicitly show the ROM area and recordable area are on a disc substrate; coating the optical recording layer over the mastered disk substrate. However, as will be appreciated by one of ordinary skill in the art, an optical recording disc is well known in the art to be a disc substrate having ROM and a recordable area; the disc having an optical recording layer coated over a mastered disc substrate.

28. In re claim 6 Yamagishi substantially shows the invention as claimed as applied to claim 2 above, but fails to show the disc identifier data are embedded in a disc identifier sub-code track within a lead-in area of the ROM area.

29. Spitzenberger et al. shows in an analogous art related to software copy protection and optically readable discs on which digital data has been recorded, in figures 1-9 and related text, a the disc identifier data are embedded in a disc identifier sub-code track within a lead-in area of the ROM area (column 2, line 10 –column 2, line 27; column 2, line 45 – column 2, line 51). The lead-in area of Spitzenberger et al. functions in aiding software copy protection because the address values defining the

lead-in area cannot be created using a standard optical recording apparatus (see Spitzenberger et al., column 2, line 18 – column 2, line 20) and thus cannot be recreated on an unauthorized copied disc. Additionally, by embedding the at least one disc identifier within the lead-in area of Spitzenberger as a sub-code track the software copy protection system is further enhanced because the sub-code data cannot be controlled directly by a standard recording device (see Spitzenberger et al., column 2, line 25 – column 2, line 27) and thus cannot be manipulated or changed by the user.

30. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the at least one disc identifier within the lead-in area of Spitzenberger et al. as a sub-code track in Yamagishi for the explicit reasons discussed herein above.

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly B Eaton whose telephone number is 703-305-3229. The examiner can normally be reached Monday through Friday from 8:00 am – 6:00 pm EST.

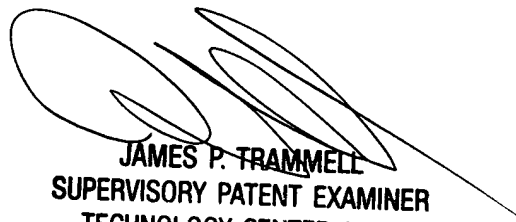
32. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on 703-305-9768.

33. The Fax phone number for the UNOFFICIAL FAX for the organization where this application or proceeding is assigned is (703) 746-7240 (for informal or draft communications, please label "PROPOSED" or "DRAFT").

34. The Fax phone number for the OFFICIAL FAX for the organization where this application or proceeding is assigned is (703) 746-7239 (for formal communications intended for entry).

35. The Fax phone number for AFTER-FINAL communications where this application or proceeding is assigned in (703) 746-7238.

36. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



**JAMES P. TRAMMELL**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2100**